ABSTRACT OF THE DISCLOSURE

A method for making a transmitter optical subassembly (TOSA) is provided. In the method, an alignment in the Z-direction between a fiber stub array (FSA) and a VCSEL array is performed first. Then, an alignment in the X-Y direction is performed. A rough prealignment in the X-Y direction may also be performed prior to the alignment in Z-direction. A vertical cavity surface emitting laser (VCSEL) array may be hermetically sealed using a lens assembly or by using a separate lid assembly. The hermetic sealing and attaching of different components may be achieved by laser welding and/or soldering or any other suitable method.